Prairie Update

A publication of the Saskatchewan Watershed Authority *Volume 31 Spring 2007*

Producer Provides Better Home For Threatened Birds

Dan Niskala, a producer in the Missouri Coteau near Dinsmore, has found a way to improve his cattle operation while conserving habitat for a threatened bird species.

Sprague's Pipits, listed as a threatened species by the Committee on the Status of Endangered Wildlife in Canada, are rarely found on tame grassland, on native prairie that is heavily invaded by brome grass, or on pastures with high densities of shrubs or trees. Due to the loss of native prairie, Sprague's Pipits populations are declining by nearly six percent per year.

Seeing an opportunity to help improve the birds' habitat while increasing the grazing capacity for his cattle herd, Niskala participated in a cropland conversion demonstration project with the Saskatchewan Watershed Authority.

"Since native grasses provide excellent pasture for my cattle while benefiting the environment, the project just made good sense," said Niskala.

Niskala seeded 60 acres of annual cropland adjacent to an existing large block of native grassland with a native grass seed mixture, thus expanding the amount of habitat available for the Sprague's Pipits, which prefer native prairie.

"Besides enhancing the grazing areas and providing a better home for the birds, converting the cropland to tame forage and installing new fencing will defer grazing on the native prairie," Niskala said.

Bob Springer, Senior Agrologist for the Saskatchewan Watershed Authority, says that all producers could see major benefits from cropland conversion.

"In addition to providing environmental benefits, native grasses are generally long-lived, help extend the grazing season and contribute to a sustainable agricultural system. It's definitely a win-win situation for both the producer and wildlife," says Springer.

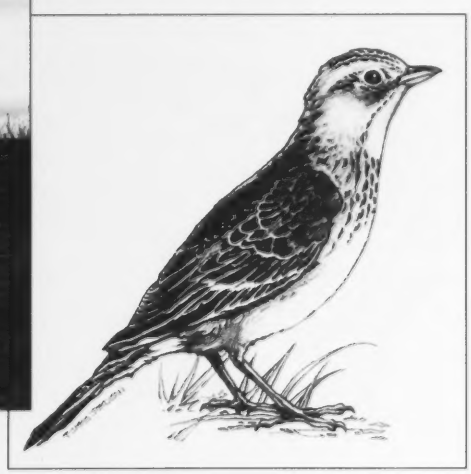
Springer adds that seeding native grass species is not as costly as one may think. Good native seed mixes can now be made for $30 to $50 an acre.

Niskala views the project as a good start in protecting the environment on his land, and recognizes the importance of balancing agricultural productivity with wildlife conservation.

"I was very happy to do my part to help the birds, and the benefits to my operation are outstanding."

Funding for the project was provided by the Government of Canada's Habitat Stewardship Program.

In this project, converting cropland to native pasture benefited both the producer's bottom line and the birds which use it as habitat.



Sprague's Pipit sketch provided by Chris Jordison.

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What's New . . .

Take a look at some of the upcoming events and new projects and programs available from the Saskatchewan Watershed Authority and our partner agencies . . .

State of the Watershed Report Released

The Honourable John T. Nilson, Q.C., Minister responsible for the Saskatchewan Watershed Authority, released Saskatchewan's first *State of the Watershed Report* on March 15th, 2007.

The *State of the Watershed Report* is a benchmarking tool for assessing watershed health to ensure source water protection and sufficient water supplies in the province. The report will provide a basis for governments, decision-makers, industry and the community to act in the long-term interest of environmental sustainability.

The report uses indicators to assess the current health of Saskatchewan's watersheds, provide information about human activities that impact the environment within watersheds, and evaluate the effectiveness of management activities. All of this information is presented in an easy-to-understand report card format.

Saskatchewan's *State of the Watershed Report* is available online at **www.swa.ca**. For more information about the report, please e-mail **StateOfTheWatershed@swa.ca**.

Introducing Digit Ash

The Saskatchewan Watershed Authority is pleased to welcome Range Ecology Technician Digit Ash to its staff. Digit, who is originally from Glentworth, recently completed her education at the University of Saskatchewan's College of Agriculture, where she majored in rangeland management.

Digit's work with the Authority will involve coordinating voluntary landowner stewardship agreements in the Missouri Coteau, with a focus on conserving areas which provide habitat for Burrowing Owls and Piping Plovers. She will also provide assistance to the Wood River Riparian Authority.

Digit is looking forward to working with producers on the projects that they want to implement, and to helping enhance conservation efforts within the Missouri Coteau. To contact Digit Ash, please call (306) 778-8386 or e-mail **digit.ash@swa.ca**.

Prairie Conservation and Endangered Species Conference a Success!

The 8th Prairie Conservation and Endangered Species Conference was held March 1st to 3rd, 2007, in Regina. The conference, which takes place every three years in one of the Canadian prairie provinces, attracted over 400 people involved in conservation to share information and discuss new opportunities to conserve and protect prairie ecosystems and endangered species.

Conference attendees had the opportunity to take in presentations from more than 30 recognized leaders in wildlife conservation, land management, research, government

agencies, industry and more. In addition, well over 80 posters prepared by conservation professionals were on display.

The 8th Prairie Conservation and Endangered Species Conference was hosted by the Saskatchewan Prairie Conservation Action Plan, with support from numerous other organizations. For more information on the 8th PCESC, please visit **www.pcesc.ca**.

New Agri-Environmental Group Plan

Producers in southeast Saskatchewan can now access funding to implement selected Beneficial Management Practices through the South East Upper Souris River Agri-Environmental Group Plan. This group plan will provide funding for individual producers who wish to implement projects specifically related to wintering site management and/or riparian area management.

On January 15th, 2007, Mark Neuman was hired as the Advisor for the new group plan. Originally from the Alameda area, Mark has been farming with his family near Frobisher for over 20 years, and has previously completed an Environmental Farm Plan for his own operation. Mark looks forward to helping local producers find workable ways to implement Beneficial Management Practices.

For more information on the South East Upper Souris River Agri-Environmental Group Plan, please contact Mark Neuman at (306) 453-2092 or e-mail **info@creda.sk.ca**.

Agri-Group Planning Advisor Mark Neuman, along with wife Glenys, son T.J. and daughter Alexandria.

State of the Saskatchewan River Basin Report

Recently, Partners FOR the Saskatchewan River Basin began developing the State of the Saskatchewan River Basin Report. This ambitious new document will provide all stakeholders in the river basin, from community groups to politicians, with the consistent, high-quality information needed for effective resource use and decision-making.

The entire Saskatchewan River Basin, from its headwaters in the eastern slopes of the Rocky Mountains and eastward across the Prairie Provinces to Lake Winnipeg, and finally to Hudson Bay via the Nelson River, will be covered in the report. The report will incorporate existing information from numerous federal, provincial, and private agencies, providing a clear picture of water quality, supply and use throughout the Saskatchewan River Basin.

The State of the Saskatchewan River Basin Report is expected to be completed in 2008. For more information on the development of the report, please contact Partners FOR the Saskatchewan River Basin at (306) 665-6887 or visit **www.saskriverbasin.ca**.

Focus on Moosomin Reservoir Day

On February 15th, the Lower Souris Watershed Committee Inc. hosted a Focus on Moosomin Reservoir Day, in conjunction with the Pipestone Creek Watershed Advisory Committee and local Wildlife Federations. The event was intended to provide local residents with more information about the reservoir and issues related to water quality.

During the morning and afternoon, Kindergarten to Grade 5 students from MacLeod Elementary School in Moosomin had a chance to learn about things like water quality sampling, plant identification and aquatic insects from Saskatchewan Watershed Authority staff, and also got to play some fun games centered on the water cycle.

That evening, approximately 55 people also attended an information session, which featured presentations on the water quality in Moosomin Reservoir and the causes of algal blooms, the role of various aquatic insects as indicator species, declines in fish populations, and stewardship options available to producers through National Farm Stewardship Program funding.

For more information on the Lower Souris Watershed Committee Inc., including details on upcoming events in the watershed, please visit **www.lowersourisriverwatershed.com** or call (306) 452-3292.

Etienne Soulodre of the Saskatchewan Watershed Authority talks to students about plant identification.

Focus On:

The South Saskatchewan River Watershed

The South Saskatchewan River Watershed incorporates a broad diversity of water users and water-related activities. The total drainage area for the South Saskatchewan River within the province is approximately 35,000 km², and about 325,000 people reside in the South Saskatchewan River Watershed. The South Saskatchewan River Watershed is one of seven priority planning areas in the province. Residents of the watershed, with assistance from the Saskatchewan Watershed Authority and other agencies, have prepared a draft ***South Saskatchewan River Watershed Source Water Protection Plan***. Some of the priority issues that are addressed in this plan include:

1. Economic Development

Photo courtesy of Saskatchewan Agriculture and Food

The South Saskatchewan River, including Lake Diefenbaker, provides a reliable source of water for drinking, agriculture, industry, recreation and other uses.

To ensure future economic development will maintain a high standard of water quality in the South Saskatchewan River, the Watershed Advisory Committees have recommended the following:

- Protect source water by coordinating the economic and environmental needs of the watershed.
- Promote responsible development around Lake Diefenbaker by supporting the Land Use Planning initiative of the Mid-Sask Regional Economic Development Authority.

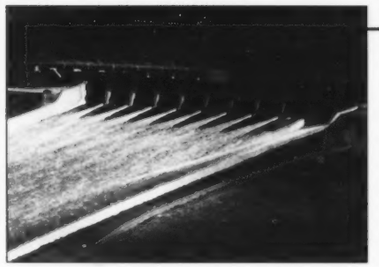
2. Groundwater

Groundwater is a source of drinking water for many people in the watershed. Groundwater resources are extensive in some parts of the South Saskatchewan River Watershed and limited in other parts. It can be difficult and expensive to determine the actual quantity of groundwater that is available for use.

Groundwater quality varies throughout the watershed, and many things that are considered "contaminants," such as arsenic, selenium, uranium, nitrate, occur naturally. Human activities such as agricultural practices, oil and gas exploration and production, and the use of septic systems, can also contaminate groundwater. And once contaminated, groundwater is not easily restored to its former condition.

To protect groundwater in the South Saskatchewan River Watershed, the Watershed Advisory Committees have recommended the following:

- To encourage proper water wellhead protection.
- To promote the proper decommissioning of abandoned water wells.
- To encourage rural residents to test their well water through the Saskatchewan Watershed Authority's *Rural Water Quality Advisory Program*.



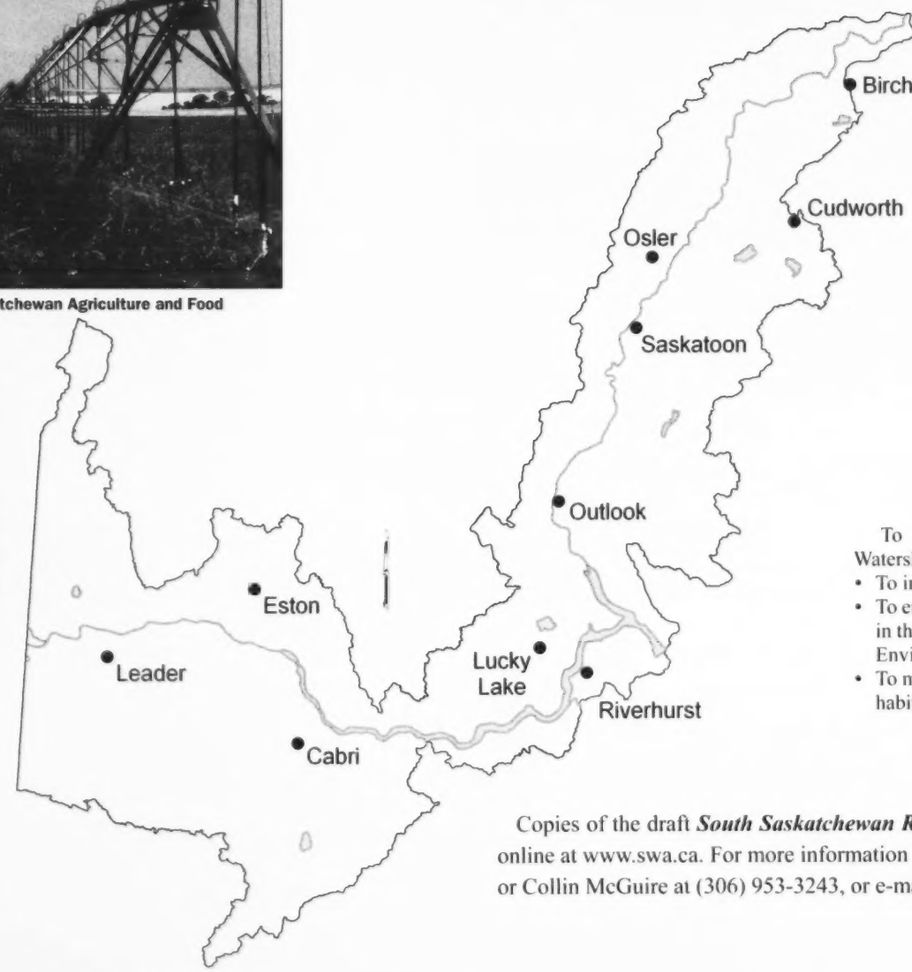
3. Lake Diefenbaker

The Gardiner Dam controls water levels in Lake Diefenbaker, a reliable source of water for many people in Saskatchewan. The Saskatchewan Watershed Authority operates the Gardiner Dam.

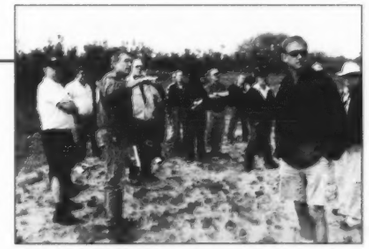
Different water users and managers often have different expectations of what water levels should be. Seasonal variations can make meeting all of these expectations particularly difficult.

The Watershed Advisory Committees have recommended the following in order to improve dam operations and communication between watershed residents and the Saskatchewan Watershed Authority on the operation of Gardiner Dam:

- Develop an operation plan and communication strategy for Gardiner Dam and Lake Diefenbaker water levels.
- Request the Saskatchewan Watershed Authority provide a quarterly report to local residents on the operation of Gardiner Dam.
- Develop a Lake Diefenbaker/Gardiner Dam Advisory Committee to give advice on optimum lake levels for stakeholders.



4. Stewardship



Stewardship means caring for land and the land's associated resources and maintaining healthy ecosystems for future generations.

Wetlands are important for source water protection because they perform functions such as groundwater recharge, water storage, flood control, sediment and residue trapping, shoreline protection, and nutrient cycling and storage.

To enhance stewardship practices within the South Saskatchewan River Watershed, the Watershed Advisory Committees have recommended the following:

- To improve storm water discharge from communities in the watershed.
- To encourage agricultural producers to adopt practices that improve water quality in the watershed, through programs such as Environmental Farm Plans and Agri-Environmental Group Plans.
- To maintain existing wetlands, including associated riparian, upland and wetland habitats, to protect their ecological function in protecting source water.

Copies of the draft ***South Saskatchewan River Watershed Source Water Protection Plan*** are available online at www.swa.ca. For more information on the draft Plan please contact Jeff Olson at (306) 786-1364 or Collin McGuire at (306) 953-3243, or e-mail **southsaskatchewanplan@swa.ca**.

Grasshopper Identification and Control Methods

Western Canada is home to more than 80 different species of grasshoppers. A new booklet is now available to help Prairie Producers identify the various species of grasshoppers and, if necessary, select the best options for controlling them.

The booklet, titled "Grasshopper Identification and Control Measures," was published by Agriculture and Agri-Food Canada and Saskatchewan Pulse Growers, with assistance from Mark Goodwin of MG Consulting and with information from Saskatchewan Agriculture and Food, Alberta Agriculture, Food and Rural Development, and the University of Lethbridge. It features full-colour photographs of common grasshopper species found on the Prairies, giving producers a handy reference to use in distinguishing various types of grasshoppers.

Not all grasshopper species are considered pests – in fact, most types do not threaten crops, and some are actually beneficial. Of the 80 species of grasshoppers found in western Canada, only about 10 cause any problem at all, and most of the damage to crops and forages is caused by only five or six of these species.

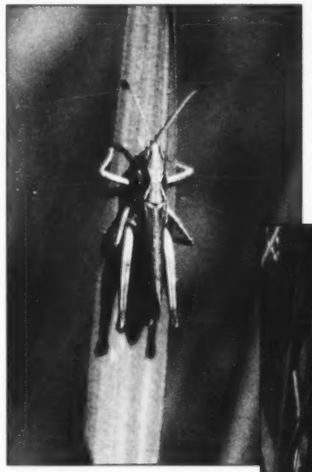
With crop production margins getting ever tighter, it makes sense for producers to spend some time identifying the type of grasshoppers that are present before spending money on controlling them with pesticides or other measures. Reducing unnecessary pesticide applications also reduces the potential for harmful impacts to the environment.

The booklet separates each species into one of three categories: significant pest status, low pest status, and neutral or beneficial species. Only significant pest status species will usually require a management response by the producer. Low pest status species cause little to no damage to crops, and their presence can generally be ignored.

The booklet also provides some tips on selecting and using chemical control agents, and information on some precautions that producers can take to reduce the potential for grasshopper damage.

Copies of the Grasshopper Identification and Control Methods booklet are available from Saskatchewan Pulse Growers in Saskatoon by contacting Amanda Olekson at (306) 668-0032 or **aolekson@saskpulse.com**. Additional information on the various grasshopper species found on the Canadian Prairies is available at **http://people.uleth.ca/~dan.johnson/htm/dj_gh_guide.htm**.

Dr. Dan Johnson, Professor of Environmental Science at the University of Lethbridge and Canada Research Chair in Sustainable Grassland Ecosystems, will also be happy to help identify pictures of grasshopper species sent to him at **dan.orthop@gmail.com**.



The club-horned grasshopper, the earliest-hatching grasshopper on the Prairies. It is sometimes mistaken as evidence of pest grasshoppers hatching early, but this species is not a pest at all.
Copyright Dan Johnson, Lethbridge.

Two-striped grasshopper, a major pest on the Prairies.
Copyright Dan Johnson, Lethbridge.

Some Basic Rules of Thumb

- Any grasshopper flying before June 1 is not a pest.
- Crop pest grasshoppers hatch in late May and early June, are brown or black, and always have tiny triangular wing buds, not large wings that can be folded back when examined closely.
- Any grasshopper with coloured hindwings (under the forewings that serve as covers) visible in flight is not a pest.
- Any grasshopper that sings, calls, clacks, clatters, or makes any other song is not a pest.
- Any grasshopper that inhabits a crop on a warm day without feeding on the vegetation may be a temporary resident that is moving to more preferred vegetation.
- Grasshoppers that remain in rangeland, headlands, or other grassland without moving into crops are likely to be species that do not damage crops.

Agri-Environmental Group Plan Improving Profitability and Land Management at Spring Valley Ranch

by Donna Bowler

When Thomas MacNeil told his boss that after 10 years toiling in Alberta's oil patch he was thinking of going back to work on his family ranch near Grand Prairie, he got an unusual reaction.

"If you're serious about this," said Robert Morgan, "why don't we do it right? I know of some land that's available in Saskatchewan."

Thomas MacNeil

So five years ago, the pair purchased two and a half sections near Spring Valley, moved 500 head of cattle onto the land, and embarked on what has become a rapidly expanding cow/calf operation. MacNeil now owns 9 quarters himself and manages 47 quarters for his boss. Together, they run 1,300 cows.

MacNeil says that in the first few years, most of the time was spent building borders and cross fences, and seeding the grain land back into grass. "It's only in the last year that I've learned the importance of native grasses and, by talking to the old-timers, planned for long term pasture management."

Although MacNeil wants to develop an Environmental Farm Plan, he hasn't been able to fit the planning workshops into his busy schedule as of yet. Fortunately, he was able to access technical and financial assistance to improve wintering site and riparian management on his ranch through the Moose Jaw River Watershed Agri-Environmental Group Plan. The Plan focuses on the protection of surface water quality within the watershed and area. Participation in the Plan provides access to cost-shared incentives within the Canada-Saskatchewan Farm Stewardship Program (CSFSP) that enable producers to winter their cattle over larger areas to distribute manure more evenly, protect riparian areas from contamination, and reduce soil erosion into streams and dugouts.

"I was actually in talking to PFRA about dugouts when Chad MacPherson, the Moose Jaw River Watershed Stewards Coordinator, poked his head around the corner and said he might be able to offer some help," says MacNeil. "Chad came out to the ranch a few times and we discussed what I wanted to do. He sketched things out and filled out the paper work. The whole process was quite easy and in just three or four weeks, I had approval to go ahead."

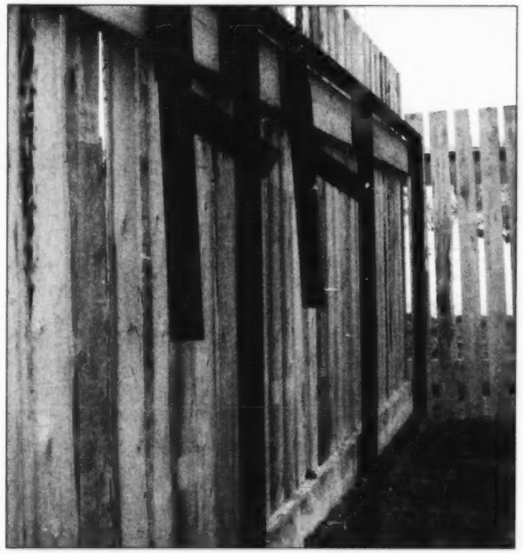
This winter, MacNeil is using 80 portable 27-foot windbreaks to provide shelter for the cattle on pastures that offer no natural protection and couldn't be used before. "I move the shelters every three or four weeks, to spread manure more evenly across the land, but it takes less time to do that rather than spread out manure that has piled up over time in one place. And I've been able to keep the cattle away from the calving-out area near the house, which will reduce the disease factor," he says.

MacNeil is also receiving assistance to fence off more native grass pastures, spring meltwater runways and large sloughs, and purchase solar-powered portable water trailers. He says these measures positively affect the ranch's bottom line, while protecting riparian areas and increasing the lifespan of sloughs and dugouts. Benefits include allowing him to use more of his land while reducing the amount of time spent tending cattle. He adds that watering cattle from troughs fed by the trailers reduces medical costs because cattle aren't standing in the water they drink, and increases weight gain in calves because they don't have to walk long distances to access water.

In fact, MacNeil says the water trailers have proven to be so profitable, that he probably would have purchased them without financial assistance. "I don't think we would have been able to do everything we are to improve our operation on our own, at least not to this scale," he says. "But with the water trailers, the gain on the calves has definitely increased due to clean udders on the cows and cleaner, more accessible water which has contributed to a higher profit."

For more information on the Moose Jaw River Watershed Agri-Environmental Group Plan, please contact Chad MacPherson at 691-3396 or e-mail **macphersonccm@agr.gc.ca**.

Funding for this program is provided by the Agri-Environmental Group Planning Initiative of the Agriculture Policy Framework Agreement.



These swivel attachments allow MacNeil to move the windbreaks without ever having to get out of the tractor.

Hello Voluntary Stewards!

Thank you for taking the time to read the Spring 2007 edition of the Prairie Update! As always, we hope you have enjoyed the articles included in this newsletter, and we welcome any comments you have. And of course, our sincere thanks go to those who agreed to share their stories with us in these pages.

You can find more information on the Prairie Stewardship Program in back issues of this newsletter. These issues, as well as interactive maps featuring other stewardship project demonstration sites, can be viewed on our Web site at **www.swa.ca**.

Angela Bethune
Paul Chomos
Ryan Lorge

Share Your Ideas!

If you have comments or ideas about this newsletter, please contact:

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For specific information about the Prairie Stewardship Program, please contact:

Jennifer Lohmeyer
phone: (306) 787-8707
e-mail: jennifer.lohmeyer@swa.ca

Ladies' Grazing Day

June 25 and 26, 2007
Spring Valley Guest Ranch, Ravenscrag
$50 registration fee

For more information or to register, contact Krista Connick at 778-8280

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North American Wetlands Conservation Council
Prairie Conservation Action Plan
Saskatchewan Agriculture and Food
Saskatchewan Environment through the Fish and Wildlife Development Fund
SaskPower
SaskPower – Shand Greenhouse
Wildlife Habitat Canada
Wyoming Game and Fish Department

Coming Events

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	Stacey Gulka	778-8386
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